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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,604	12/26/2001	Pieter Cornelis Lunenburg	116-104US	4497
466	7590	03/17/2004	EXAMINER	
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			TRIEU, VAN THANH	
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 03/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/025,604

Applicant(s)

LUNENBURG ET AL.

Examiner

Van T Trieu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## ***DETAILED ACTION***

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "housing" and the "volt/current meter" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the claimed "volt/current meter" is not described in the specification.

3. The disclosure is objected to because of the following informalities: in the abstract, change the phrase "energiser" to --- energizer ---.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by **May** [US 5,651,025].

Regarding claim 1, the claimed method of transmitting information along a fence conductor characterized in that the information is embedded within and spread across a series of short high voltage signal burst of high frequency (the method of communication device arranged to send a communication information signal in the form of code pulses down an electric fence line by a pulse position modulation or a frequency modulation circuit to generate information in bursts of short pulses in frequency about 10-50 kHz along the electric fence line, see Figs. 1-6, col. 2, lines 63-67, col. 3, lines 1-19, col. 4, lines 18-53 and col. 6, lines 11-49).

Regarding claim 2, all the claimed subject matters are cited in respect to claim 1 above, and including the frequency range is between substantially 50 to 150 kHz.

Regarding claim 3, all the claimed subject matters are cited in respect to claim 2 above, and including the signal bursts have an amplitude in the range of a fraction of one volt

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up to a maximum of several thousand volts (the amplitude voltage levels as shown in Figs. 5 and 6, see col. 5, lines 35-67 and col. 6, lines 1-59).

Regarding claim 4, all the claimed subject matters are cited in respect to claim 3 above, and including the duration of individual bursts is in the range of 100 microseconds to 1000 microseconds (the typical coded signal sent out would have a period in the range of one microsecond to two seconds and corresponding to between one and one million bits of data, see col. 3, lines 57-60).

Regarding claim 5, all the claimed subject matters are cited in respect to claim 1 above, and including the signal burst is encoded with one or more digital bits (the coded signal, see col. 3, lines 55-67 and col. 4, lines 1-18).

Regarding claim 6, all the claimed subject matters are cited in respect to claims 1 and 5 above.

Regarding claim 7, the claimed housing which reads upon the communication device connected to the electric fence at permanent locations in the electric fence network or may be a portable devices like hand-held units, which are in the form of housing or enclosure, see col. 3, lines 25-30); and the contact means (the controllable switch SCR 6, see Fig. 1, col. 2, lines 40-52 and col. 5, lines 3-21); and the generating means pulse position modulation or frequency modulation circuit for generating information in bursts

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of short pulses in frequency about 10-50 kHz, see Figs. 1-6, col. 2, lines 63-67, col. 3, lines 1-19, col. 4, lines 18-53 and col. 6, lines 11-49).

Regarding claim 8, all the claimed subject matters are cited in respect to claim 7 above, and including the volt/current meter (the Equation 1, see col. 5, lines 22-60).

Regarding claim 9, all the claimed subject matters are cited in respect to claim 8 above, and including the separate contact means to provide for voltage measurement by the volt/current meter (the separate controllable switch SCR 6, see Fig. 1, col. 2, lines 40-52 and col. 5, lines 22-60).

Regarding claim 10, all the claimed subject matters are cited in respect to claims 2 and 7 above.

Regarding claim 11, all the claimed subject matters are cited in respect to claim 1 above, and including the high voltage isolation means (the transformer 2, see Fig. 1, col. 5, lines 22-51); and the capacitor (the capacitor 6, see Fig. 2, col. 6, lines 24-27).

Regarding claim 12, all the claimed subject matters are cited in respect to claim 11 above, and including the capacitor forms part of resonant circuit, which reads upon the capacitor 6, the controllable switch 10 and bleed resistor 7 produce pulses at different lengths to give the coding information as shown in Figs. 4 and 5, col. 6, lines 11-48.

Regarding claim 13, all the claimed subject matters are cited in respect to claim 12 above, and including the receiving means (the communication devices used may be both transmitters and receivers for sending and receiving information on an electric fence system, see col. 3, lines 31-35 and 55-56).

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**May** discloses a communication device arranged to send a communication signal in the form of code pulses down an electric fence line. [US 5,420,885]

**Sojdehei et al** discloses an intrusion detector have barrier sensor modules arranged along a perimeter to sense seismic vibrations caused by intrusions within the area. The modules transmit data via magneto-inductive signals in the ELF to VLF range through ground, air, and/or water to at least one buried relay module within the area.

[US 5,969,608]

**Reeves et al** discloses the information transmission of data along electric fences embedded within a series of short high voltage signal bursts of frequency 50-190 Khz and duration of the individual burst is 100-1000 microsecond. [DE 10163406A1]

6. Any inquiry concerning this communication or earlier communications from examiner should be directed to primary examiner **Van Trieu** whose telephone number

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is (703) 308-5220. The examiner can normally be reached on Mon-Fri from 7:00 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. **Jeffery Hofsass** can be reached on (703) 305-4717.

The office facsimile number is (703) 872-9314.

A handwritten signature in black ink, appearing to read 'Van Trieu', with a long, sweeping horizontal stroke extending to the right.

**Van Trieu**  
**Primary Examiner**  
**Date: 3/15/04**